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Reply to the Office Action of 02/25/2005

REMARKS

Applicant wishes to thank the Examiner for the telephone call on Thursday, March 24, 2005. Discussed was the proposed amendment to the claims. Accordingly, Applicant has amended independent Claims 1, 3, 6, 8, 13, and 17, to more clearly recite the present invention. Reexamination and reconsideration of this application as amended is requested. By this Amendment, Claims 1-4, 6-8, 12-13, and 17 have been amended. No claims have been canceled. After this Amendment, Claims 1-20 remain pending in this application.

Claims Rejection under 35 U.S.C. §103

The Examiner rejected Claims 1, 3, 6, 8, 10, 13-15, and 17-19 under 35 U.S.C. §103(a), as being unpatentable over Haggerty et al. (U.S. Patent No. 6,331,983) in view of Hardjono (U.S. Patent No. 6,643,773).

Applicant has amended independent Claims 1, 3, and 6 to more clearly and distinctly recite the present invention. Amended Claim 1 now more clearly and distinctly recites "receiving a mail message that is created and sent by a user, the user associating the mail message with a plurality of destinations". Also, amended Claims 1, 3, and 6 now more clearly and distinctly recite "destination network addresses" and "wherein the multicast packet includes a packet header comprising the plurality of destination network addresses, wherein at least one of the plurality of destination network addresses is a unicast address". Applicant has also amended Claims 2, 4, 7, and 12, for further clarification and not for patentability or to further limit the claim in view of any prior art. In amended Claims 2, 7, and 12, the "term small group multicast" has been changed to "Small Group Multicast". No new matter was added. Support for these amendments may be found in the specification as originally filed. See for example, incorporated U.S. Patent No. 6,625,773, column 3, lines 30-67 to column 4, lines 1-52; col. 5, lines 20-28; and the incorporated U.S. Patent No. 6,415,312, column 3, lines 1-59.

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Independent Claims 8, 13, and 17, were also amended to more clearly and distinctly recite the present invention. Amended Claims 8, 13, and 17, now more clearly recite “wherein the multicast packet includes a packet header comprising the plurality of destination network addresses” and “wherein at least one of the plurality of destination network addresses is a unicast address”. No New matter was added. Support for these amendments may be found in the specification as originally filed. See for example, incorporated U.S. Patent No. 6,625,773, column 3, lines 30-67 to column 4, lines 1-40, and col. 5, lines 20-28; and the incorporated U.S. Patent No. 6,415,312, column 3, lines 1-59.

The Examiner concluded that Haggerty teaches the present invention as recited for Claims 1, 3, and 6, and cited several paragraphs in Haggerty in support thereof. Applicant respectfully disagrees with the Examiner. In particular, the Examiner concluded that Haggerty teaches the following in Claim 1:

“receiving a mail message created by a user with a plurality of destinations, the user being the sender of the mail message;”

As stated above, Applicant has amended Claim 1 to more clearly and distinctly recite:

“receiving a mail message that is created and sent by a user, the user associating the mail message with a plurality of destinations”

The Examiner also concluded the same for the following element of Claims 3 and 6:

“a mail message with addresses corresponding to a plurality of destinations;”

The Examiner relied upon col. 11, line 60 to col. 12, line 15 and col. 12, line 55 to col. 13, line 12 of Haggerty, to reject the above elements of Claims 1, 3, and 6.

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The Examiner's reliance upon the citations of Haggerty is misplaced for the following reasons: Col. 11, line 60 to col. 12, line 15 merely discloses an MCast router that keeps track of its local hosts and what multicast group the local host has subscribed to. The MCast router sends a single copy of a received multicast packet onto its local subnet only if a local host is a member of the corresponding multicast group addressed by the multicast packet. Col. 12, line 55 to col. 12, line 12 merely discloses the reception of an IP multicast packet, which has been placed into the data field of a LAN packet, by the MCast router. Haggerty further discloses that **a multicast packet does not contain an IP destination host address, but rather contains a destination IP address of a multicast group.**

There is no mention in any of the relied upon citations of Haggerty of "receiving a mail message that is created and sent by a user, **the user associating the mail message with a plurality of destinations**". The mail message, as recited for Claims 1, 3, and 6, **includes the plurality of destination addresses.** Furthermore, the mail message, as recited for Claims 3 and 6, includes "addresses corresponding to **a plurality of destination addresses**", which Haggerty fails to teach. Nowhere does Haggerty teach receiving a mail message as recited for Claims 1, 3, and 6. The Examiner acknowledges on page 3 of the present Office Action, that Haggerty does not teach distributing an electronic mail message, as recited for the present invention.

The Examiner goes on to state that Haggerty does suggest the use of multicasting in transmission of messages/packets over the Internet such as transmission of corporate messages to employees. However, Haggerty only discloses **standard** multicast which uses a Class D IP address. A Class D address is a **single** address for a multicast group. See Haggerty at col. 13, lines 10-35. In fact, Haggerty even explicitly teaches that the multicast packet only contains a **single** destination IP address of a multicast group. See Examiner's citation of Haggerty at col. 13, lines 10-12. The multicast packet only has information to get the packet to the multicast group, the MCast router knows the

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multicast group or groups that a local host has subscribed to, and when a multicast packet with a **single** multicast group address is received, the MCast router forwards a copy of the multicast packet to the appropriate group. Therefore Claims 1, 3, and 6, distinguish over Haggerty for at least this reason.

The Examiner also concluded that Haggerty teaches the following in Claims 1, 3, and 6, and cited several paragraphs in Haggerty in support thereof.

“sending a single copy of the mail message, in a multicast packet including a plurality of destination addresses across the network via at least one intermediate node to addresses corresponding to the plurality of destination addresses using a reliable multicast technique.”

The Examiner relied upon col. 6, lines 12-22 and col. 13, lines 36-45 of Haggerty, to reject the above step of Claims 1, 3, and 6.

Applicant has amended Claims 1, 3, and 6, to more clearly and distinctly recite the present invention. The present invention, as recited for Claims 1, 3, and similarly Claim 6, now more clearly and distinctly recites:

“sending a single copy of the mail message, in a multicast packet, across the network via at least one intermediate node to destinations corresponding to a plurality of destination network addresses using a reliable multicast technique, wherein the multicast packet includes a packet header comprising the plurality of destination network addresses, wherein at least one of the plurality of destination network addresses is a unicast address.”

Applicant respectfully disagrees, especially in view of the amended language, with the Examiner's conclusion that Haggerty teaches the above step of the present invention. The Examiner's reliance upon the citations of Haggerty is misplaced for the following reasons. Col. 6, lines 12-22, merely discloses that designated routers construct

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a spanning tree connecting all members of an IP multicast group together. Messages are replicated only at the tree branches, thus minimizing the number of message copies that are transmitted through the network. Col. 13, lines 36-45 merely teaches that a host places data into an IP multicast packet which specifies an appropriate **multicast group destination**, and then transmits the packet.

There is no mention in any of the relied upon citations of Haggerty of “sending a single copy of the mail message, in a multicast packet, across the network via at least one intermediate node to **destinations** corresponding to a **plurality of destination network addresses** using a **reliable multicast technique**, wherein the multicast packet includes a packet header comprising the **plurality of destination network addresses**, wherein at least one of the **plurality of destination network addresses is a unicast address**”. As discussed above, Haggerty teaches using standard multicast in which IP multicast packets include a **single address for a multicast group**. See for example, Haggerty at Abstract, col. 3, lines 8-10; col. 3, lines 66-67 to col. 4, lines 1-2; col. 11, lines 38-44 and 51-56; and col. 13, lines 10-35 and 36-45. Haggerty teaches that **all** multicast packets use Class D IP addresses, which identifies an IP packet for a multicast group. See Haggerty at col. 13, lines 10-35. This is not the same as a multicast packet including a packet header comprising a plurality of destination network addresses corresponding to a plurality of destinations, as recited for Claims 1, 3 and 6.

Haggerty explicitly teaches that “[m]ulticast is a receiver-based concept: receivers join a particular multicast session group and traffic is delivered to all members of that group. **The sender does not need to maintain a list of receivers**” and “a multicast IP packet does not contain an IP destination host address, but rather contains a destination IP address of a multicast group.” See Haggerty at col. 1, lines 30-33 and 10-12. In other words, the multicast packet, as taught by Haggerty, does not have any information as to who the receivers of the packet will be, the packet only contains a single multicast group address to which receivers have subscribed. The Examiner is citing to Haggerty where Haggerty only discloses what happens after a router receives the multicast packet. Once

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the router receives the multicast packet, which includes the single multicast group address, the router checks whether any of its local hosts are subscribed to the group addressed by the multicast packet and the router then forwards a copy of the packet accordingly. As stated above, the multicast packet, as taught by Haggerty, does not contain any information regarding who receives the packet.

In contrast, the multicast packet as recited for the presently claimed invention includes a packet header comprising a plurality destination network addresses. In particular, the packet header includes the physical destination addresses (destination network addresses) of the mail message recipients. The packet header includes information regarding who receives the packet. The destination network addresses allow the multicast packet to be routed all the way through the network to the receiver. Therefore, Haggerty fails to teach a multicast packet including a packet header comprised of a plurality of destination network addresses corresponding to the plurality of destinations in the mail message and Claims 1, 3, and 6, distinguish over Haggerty for at least this reason as well.

Furthermore, nowhere does Haggerty teach, anticipate, or even suggest that one or more of the destination network addresses in the packet header of the multicast packet is a unicast address. As stated above, Haggerty explicitly teaches that a multicast packet includes a single multicast group address. Therefore, Claims 1, 3, and 6 and new Claims 21-22 distinguish over Haggerty for this reason as well.

The Examiner also concluded that Hardjono discloses that multicasting is well-known in the art for transmitting data messages such as email messages to selected groups of users across a network like the Internet and relied upon the Abstract and col. 1, lines 13-25 of Hardjono in support thereof. Applicant respectfully disagrees with the Examiner.

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Hardjono merely mentions “[o]ne simple example of multicasting entails transmitting an E-mail message to a plurality of users that each are on a mailing list.” See Hardjono at col. 1, lines 15-17. Hardjono never again mentions an email message nor how to use multicast with an email message. Therefore, Hardjono is not enabling with respect to using multicast with an email message. Additionally, Hardjono is directed towards authenticating messages in a multicast and explicitly states that multicast is used to transmit messages to **selected groups of users**. See for example, Hardjono at col. 1, lines 13-15.

Furthermore, the multicast packet, as claimed for Claims 1, 3, and 6, includes a packet header comprising a plurality of destination network addresses. As discussed above, the presence of the destination network addresses in the packet header allows the multicast packet to be routed through the network to the final recipient. User-level addresses such as johndoe@abc.com are not kept in the packet header, namely, they are neither physical network addresses, nor are they used to route the multicast packet through the network. Therefore, Hardjono fails to teach “receiving a mail message that is created and sent by a user, the user associating the mail message with a plurality of destinations”; “receiving a mail message with addresses corresponding to a plurality of destinations”; and sending a single copy of the mail message, in a multicast packet, across the network via at least one intermediate node to **destinations** corresponding to a **plurality of destination network addresses using a reliable multicast technique**, wherein the multicast packet includes a packet header comprising the plurality of destination network addresses, wherein at least one of the plurality of destination network addresses is a unicast address as recited for Claims 1, 3, and 6 respectively. Therefore, Claims 1, 3, and 6, distinguish over Hardjono for at least these reasons

Additionally, the Examiner recites 35 U.S.C. § 103. The Statute expressly requires that obviousness or non-obviousness be determined for the claimed subject matter as a whole and the key to proper determination of the differences between the prior art and the present invention is giving full recognition to the invention as a whole.

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Haggerty taken alone and/or in view of Hardjono simply does not teach or suggest receiving a mail message that is created and sent by a user, the user associating the mail message with a plurality of destinations, as recited for Claim 1; a mail message with addresses corresponding to a plurality of destinations, as recited for Claims 3 and 6; or sending a single copy of the mail message, in a multicast packet, across the network via at least one intermediate node to destinations corresponding to a plurality of destination network addresses using a reliable multicast technique, wherein the multicast packet includes a packet header comprising the plurality of destination network addresses, wherein at least one of the plurality of destination network addresses is a unicast address, as recited for Claims 1, 3 and 6.

Continuing further, when there is no suggestion or teaching in the prior art for that disclosed in the application, the suggestion can not come from the Applicant's own specification. As the Federal Circuit has repeatedly warned against using the Applicant's disclosure as a blueprint to reconstruct the claimed invention out of isolated teachings of the prior art. See MPEP §2143 and Grain Processing Corp. v. American Maize-Products, 840 F.2d 902, 907, 5 USPQ2d 1788 1792 (Fed. Cir. 1988) and In re Fitch, 972 F.2d 160, 12 USPQ2d 1780, 1783-84 (Fed. Cir. 1992).

Therefore, in view of the foregoing remarks and amendments, Applicant believes that the rejection of Claims 1, 3, and 6, under 35 U.S.C. § 103(a) has been overcome. Applicant requests that the Examiner withdraw the rejection and allow Claims 1, 3, 6.

Regarding Claims 8, 13, and 17, the Examiner concluded that Haggerty teaches the present invention as recited for Claims 8, 13, and 17 and cited several paragraphs in Haggerty in support thereof. Applicant respectfully disagrees with the Examiner. In particular, the Examiner concluded that Haggerty teaches the following in Claims 8, 13, and 17:

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“receiving a mail message in a multicast packet including a plurality of destination addresses”

Applicant has amended Claims 8, 13, and 17, to more clearly and distinctly recite the present invention. Claims 8, 13, and 17, now more clearly and distinctly recite:

“receiving a mail message in a multicast packet including a packet header comprising a plurality of destination network addresses, wherein at least one of the plurality of destination network addresses is a unicast address”

As discussed above, Haggerty does not teach a **packet header comprising a plurality of destination network addresses, wherein at least one of the plurality of destination network addresses is a unicast address**, Haggerty teaches a **single address for a multicast group**. Accordingly, the arguments above with respect to Claims 1, 3, and 6 are applicable here and will not be repeated.

The Examiner also concluded that Haggerty teaches the following in Claims 8, 13, and 17:

“determining one or more “next hops” corresponding to the plurality of destination addresses for forwarding the packet”

The Examiner relied upon col. 12, line 55 to col. 13, line 9 of Haggerty, to reject the above step.

Applicant has amended Claims 8, 13, and 17, to more clearly and distinctly recite the present invention. Claims 8, 13, and 17, now more clearly recite:

“determining one or more “next hops” corresponding to the plurality of destination network addresses in the packet header for forwarding the packet”

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Applicant respectfully disagrees with the Examiner's conclusion that Haggerty teaches the above step of the present invention. The Examiner's reliance upon the citations of Haggerty is misplaced for the following reasons. Col. 12, line 55, to col. 13, line 9, of Haggerty merely discloses a prior art LAN packet, IP packet, and IP Multicast packet (**which only contains a single address for a multicast group**). Haggerty discloses that the MCast router receives the LAN packet, which contains the IP multicast packet, and examines the IP multicast packet to determine where the packet gets routed to next.

As stated above, the IP multicast packet **does not** contain an IP destination host address (See for example, Haggerty at col. 13, lines 10-12) so the multicast packet only identifies the multicast group to the MCast router. Therefore, the MCast router has to use its own internal knowledge of its local hosts to determine where to send a copy of the packet. See Haggerty at col. 11, lines 60-67. When the MCast router receives the IP multicast packet, it looks at the **single multicast group address** and determines whether any of its local hosts have subscribed to that **multicast group address**. If the MCast determines that a local host has subscribed to the **multicast group address** that was included in the multicast packet, the MCast router sends a single copy onto the local subnet where the local subscriber will receive that packet. See for example, Haggerty at col. 12, lines 1-15.

In contrast, Claims 8, 13, and 17, recite "determining one or more "next hops" corresponding to the **plurality of destination network addresses in the packet header** for forwarding the packet. As discussed above, Haggerty fails to teach a multicast packet including a packet header comprising a plurality of destination network addresses. Therefore, it is impossible for Haggerty to determine one or more next hops corresponding to the plurality of destination network addresses in the packet header for forwarding the packet. Haggerty determines where the packet gets routed to next based upon the MCast router's internal knowledge of its local hosts and not based on

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destination network addresses in a packet header. Accordingly, Claims 8, 13, and 17, distinguish over Haggerty for at least this reason.

The Examiner also concluded that Hardjono discloses that multicasting is well-known in the art for transmitting data messages such as email messages to selected groups of users across a network like the Internet and relied upon the Abstract and col. 1, lines 13-25 of Hardjono in support thereof. Applicant respectfully disagrees with the Examiner. The arguments above regarding Claims 1, 3, and 6, are likewise applicable here and will not be repeated.

Additionally, the Examiner recites 35 U.S.C. § 103. The Statute expressly requires that obviousness or non-obviousness be determined for the claimed subject matter as a whole and the key to proper determination of the differences between the prior art and the present invention is giving full recognition to the invention as a whole. Haggerty taken alone and/or in view of Hardjono simply does not teach or suggest **receiving a mail message in a multicast packet including a packet header comprising a plurality of destination network addresses, wherein at least one of the plurality of destination network addresses is a unicast address and determining one or more "next hops" corresponding to the plurality of destination network addresses in the packet header for forwarding the packet**, as similarly recited for Claims 8, 13, and 17.

Continuing further, when there is no suggestion or teaching in the prior art for that disclosed in the application, the suggestion can not come from the Applicant's own specification. As the Federal Circuit has repeatedly warned against using the Applicant's disclosure as a blueprint to reconstruct the claimed invention out of isolated teachings of the prior art. See MPEP §2143 and Grain Processing Corp. v. American Maize-Products, 840 F.2d 902, 907, 5 USPQ2d 1788 1792 (Fed. Cir. 1988) and In re Fitch, 972 F.2d 160, 12 USPQ2d 1780, 1783-84 (Fed. Cir. 1992).

Additionally, Claims 10, 14-15, 18-19, depend from Claims 8, 13, and 17,

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respectively, and, since dependent claims recite all of the limitations of the independent claim; it is believed that, therefore, Claims 10, 14-15, 18-19 also recite in allowable form.

Therefore, in view of the amendment and foregoing remarks, Applicant believes that the rejection of Claims 8, 10, 13-15, and 17-19 under 35 U.S.C. § 103(a) has been overcome. Applicant requests that the Examiner withdraw the rejection and allow Claims 8, 10, 13-15, 17-19.

(3) Turning now to Claims 2, 4, 7, 9, and 12, the Examiner rejected these claims under 35 U.S.C. § 103(a), as being unpatentable over Haggerty et al. (U.S. Patent No. 6,331,983) in view of Hardjono (U.S. Patent No. 6,643,773) and further in view of Boivie et al., "Small Group Multicast: A New Solution for Multicasting on the Internet", IEEE, May-June 2000.

Regarding Claims 2, 4, 7, 9, and 12, the Examiner correctly concluded that Haggerty and Hardjono do not explicitly teach using Small Group Multicast, as recited by Claims 2, 4, 7, 9, and 12. However, the Examiner stated that Haggerty does suggest the use of IGMP for managing requests to join a multicast group(s) and receive multicast traffic. The Examiner cited Haggerty at col. 3, lines 21-29 and col. 4, lines 56-61 in support thereof. The Examiner also stated that the Boivie et al. reference discloses the use of multicasting data transmissions with a SGM scheme and cited page 75, third column and pages 77-78 of the Boivie et al. reference in support thereof. The Examiner, therefore, concluded that it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate small group multicast, as disclosed by SGM, into the transmission of multicast messages/packets across the network of information processing units and intermediate nodes, as disclosed by Haggerty.

Applicant respectfully disagrees with the Examiner. As discussed above, Applicant has amended Claims 1, 3, and 6 to more clearly and distinctly recite the present invention. Claims 1, 3, and 6, and accordingly dependent Claims 2, 4, and 7, which

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depend from Claims 1, 3, and 6, respectively, more clearly and distinctly recite "sending a single copy of the mail message, in a multicast packet across the network via at least one intermediate node to destinations corresponding to a plurality of destination network addresses using a reliable multicast technique and "wherein at least one of the destination network addresses of the plurality of destination network addresses is a unicast address". Claims 9 and 12 depend from Claim 8 and therefore, also recite the novel aspects of the present invention as recited for Claim 8.

As has already been discussed above with respect to the rejection of Claims 1, 3, and 6 and 8, 13 and 17, based on the teachings of Haggerty in view of Hardjono, neither cited reference nor any combination thereof teaches, anticipates, or suggests, the presently claimed mail message in a multicast packet including a **packet header comprising a plurality of destination network addresses** or at least one of the destination network addresses of the plurality of destination network addresses being a **unicast address**. Note that Haggerty explicitly teaches that the multicast packet is comprised of a **single multicast group address**. Haggerty and Hardjono also do not teach using a reliable multicast technique in which a multicast packet includes a plurality of destination network addresses, e.g., physical addresses.

Additionally, the Examiner's reliance on Haggerty suggesting IGMP is misplaced for the following reasons: IGMP is used by multicast routers to learn the existing host group members on their directly attached subnets. See Haggerty at col. 4, lines 57-59. IGMP uses a **single** multicast group address and therefore, precludes using Small Group Multicast, which uses a plurality of destination network addresses, i.e. unicast addresses.

The Boivie et al. reference, does not teach how to implement a reliable multicast technique based on Small Group Multicast. The Boivie et al. reference merely states that it is possible to adapt SGM to support reliable multicast, the reference is not enabling with respect to this statement. Also, the Boivie et al. reference does not address mail messages, but instead specifically discusses IP multicasting and SGM where users can

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join multicast groups. Nowhere does the reference teach, anticipate, or suggest, using multicast for an electronic mail system, especially as recited for the presently claimed invention. Note that in the present invention, the sender is determining who the receivers will be. This is different than traditional IP multicast because in traditional IP multicast the receivers actively seek out the information to be received by subscribing to a multicast group. The sender of the information does not identify the receivers, only a specific multicast group.

Furthermore, the Examiner recites 35 U.S.C. § 103. The Statute expressly requires that obviousness or non-obviousness be determined for the claimed subject matter as a whole and the key to proper determination of the differences between the prior art and the present invention is giving full recognition to the invention as a whole. Haggerty taken alone and/or in view of Hardjono and Boivie et al. simply does not teach or suggest using **Small Group Multicast** as recited for the presently claimed invention.

Also, when there is no suggestion or teaching in the prior art for that disclosed in the application, the suggestion can not come from the Applicant's own specification. As the Federal Circuit has repeatedly warned against using the Applicant's disclosure as a blueprint to reconstruct the claimed invention out of isolated teachings of the prior art. See MPEP §2143 and Grain Processing Corp. v. American Maize-Products, 840 F.2d 902, 907, 5 USPQ2d 1788 1792 (Fed. Cir. 1988) and In re Fitch, 972 F.2d 160, 12 USPQ2d 1780, 1783-84 (Fed. Cir. 1992).

Therefore, in view of the foregoing remarks, Applicant believes that the rejection of Claims 2, 4, 7, 9, and 12, under 35 U.S.C. § 103(a) has been overcome. Applicant requests that the Examiner withdraw the rejection and allow Claims 2, 4, 7, 9, and 12.

(4) The Examiner rejected Claims 5, 11, 16, and 20 under 35 U.S.C. §103(a), as being unpatentable over Haggerty et al. (U.S. Patent No. 6,331,983) in view of Hardjono (U.S. Patent No. 6,643,773) and in further view of Provino et al. (U.S. Patent No.

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6,269,085).

Regarding Claims 5, 11, 16, and 20, the Examiner correctly concluded that Haggerty and Hardjono do not explicitly teach processing ACKs/NAKs and packet retransmissions, as recited for Claims 5, 11, 16, and 20. The Examiner also stated that Hardjono suggests the use of acknowledgements received from neighbor nodes and that Provino discloses multicast transmission with ACKs/NAKs and retransmission of data packets. The Examiner concluded that therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate ACKs/ NAKS and performing packet retransmissions, as disclosed by Provino, into the transmission of multicast messages/packets across the network of information processing units and intermediate nodes, as disclosed by Haggerty.

Claims 5, 11, 16, and 20 depend from Claims 3, 8, 13, and 17 respectively. As discussed above, neither Haggerty, Hardjono, nor any combination thereof, teaches, anticipates, or suggests, the presently claimed mail message in a multicast packet including a **packet header comprising a plurality of destination network addresses**, as recited for Claims 3, 8, 13, and 17, or at least one of the destination network addresses of the plurality of destination network addresses being a unicast address, as recited for Claims 1, 3, 6, 8, 13, and 17. Note that Haggerty explicitly teaches that the multicast packet is comprised of a **single multicast group address**. Haggerty and Hardjono also do not teach using a reliable multicast technique in which a multicast packet includes a plurality of destination network addresses, i.e. unicast addresses (See Claim 3, 6, 8, 13, and 17).

With respect to Provino, the Examiner relied upon col. 1, lines 10-21, and col. 2, lines 5-11, to reject Claims 5, 11, 16, and 20.

The Examiner's reliance upon the citations of Provino is misplaced for the following reasons. Col. 1, lines 10-21, line 15, merely discloses standard multicast

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(multicast packet with a **single multicast group address**) and a repair tree that includes repair heads that receive ACKs and NAKs. Col. 2, lines 5-11 merely discloses that the receiver and intermediate nodes at each level of the repair tree, from time to time, forward to their respective repair heads flow control messages in the form of ACK/NAK messages.

There is no mention in any of the relied upon citations of Provino of “a multicast packet including a **packet header comprising a plurality of destination network addresses**”, as recited for independent Claims 3, 8, 13, and 17, which Claims 5, 11, 16, and 20 depend from respectively. Provino explicitly teaches that a multicast packet is sent to a multicast group address. See for example, Provino at col. 1, lines 13-14 and lines 65-66; col. 3, lines 42-43. Therefore, Provino teaches a multicast packet with a **single multicast group address** and not a plurality of destination network address, as recited for Claims 3, 8, 13, and 17 and accordingly Claims 5, 11, 16, and 20.

Additionally, nowhere does Provino disclose that at least one of the destination network addresses of a plurality of destination network addresses is a unicast address, as recited for Claims 3, 8, 13, and 17 and accordingly Claim 5. Nor does Provino teach determining next hops for a destination network address of the plurality of destination network address in the packet header, as recited for Claims 8, 13, and 17 and accordingly Claims 11, 16, and 20. Therefore, Claims 3, 8, 13, and 17 and accordingly Claims 5, 11, 16, and 20 distinguish over Provino for at least these reasons.

Furthermore, the Examiner recites 35 U.S.C. § 103. The Statute expressly requires that obviousness or non-obviousness be determined for the claimed subject matter as a whole and the key to proper determination of the differences between the prior art and the present invention is giving full recognition to the invention as a whole. Haggerty taken alone and/or in view of Hardjono and/or in further view of Provino

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simply does not teach or suggest the present invention as recited for Claims 3, 8, 13, and 17 and accordingly Claims 5, 11, 16, and 20.

Continuing further, when there is no suggestion or teaching in the prior art for that disclosed in the application, the suggestion can not come from the Applicant's own specification. As the Federal Circuit has repeatedly warned against using the Applicant's disclosure as a blueprint to reconstruct the claimed invention out of isolated teachings of the prior art. See MPEP §2143 and *Grain Processing Corp. v. American Maize-Products*, 840 F.2d 902, 907, 5 USPQ2d 1788 1792 (Fed. Cir. 1988) and *In re Fitch*, 972 F.2d 160, 12 USPQ2d 1780, 1783-84 (Fed. Cir. 1992).

Therefore, in view of the foregoing remarks and amendments, Applicant believes that the rejection of Claims 5, 11, 16, and 20 under 35 U.S.C. § 103(a) has been overcome. Applicant requests that the Examiner withdraw the rejection and allow Claims 5, 11, 16, and 20.

Other References Cited

Applicant has reviewed both Christie et al. references (U.S. Patent Nos. 5,757,669 and 6,182,117) and believes that neither reference taken alone or in combination with each other or with any combination of the references cited above teaches, anticipates, or suggests, the presently claimed invention.

The disclosures of both Christie references are identical with respect to e-mail messages and multicasting. For example, Christie '669 and Christie '117 at col. 5, lines both disclose that "[a] process known as multicasting can be used to send one replication message to all of the necessary sites". Christie '669 and '117 also disclose at col. 18, lines 42-53, and col. 18, lines 39-50, respectively, that multicasting can be used to send one e-mail message to all of the sites.

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There is no mention in either Christie reference of a multicast packet including a packet header comprising a plurality of destination network addresses, as recited for the presently claimed invention. The arguments above regarding Claims 1, 3, 6, 8, 13, and 17, with respect to the "packet header, "destination network addresses", and "mail message" are also applicable here and will not be repeated. Additionally, neither reference discloses that at least one of the destination network addresses of the plurality of destination network addresses is a unicast address, as recited for Claims 1, 3, 6, 8, 13, and 17. Also, both Christie references fail to teach Small Group Multicast as defined by the present invention.

Therefore, each of the Christie references, either taken singly or in any combination with each other or in combination with any of the references cited by the Examiner, does not teach, anticipate, or suggest, the presently claimed invention.

Conclusion

The foregoing is submitted as a full and complete response to the Official Action mailed February 25, 2005, and it is suggested that Claims 1-20 are in condition for allowance. Reconsideration of the rejection is requested. Allowance of Claims 1-20 is earnestly solicited.

No amendment made was related to the statutory requirements of patentability unless expressly stated herein. No amendment made was for the purpose of narrowing the scope of any claim, unless Applicant has argued herein that such amendment was made to distinguish over a particular reference or combination of references.

Applicant acknowledges the continuing duty of candor and good faith to disclose information known to be material to the examination of this application. In accordance with 37 CFR §1.56, all such information is dutifully made of record. The foreseeable equivalents of any territory surrendered by amendment are limited to the territory taught

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by the information of record. No other territory afforded by the doctrine of equivalents is knowingly surrendered and everything else is unforeseeable at the time of this amendment by the Applicant and his attorneys.

The present application, after entry of this amendment, comprises twenty (20) claims, including six (6) independent claims. Applicant has previously paid for twenty (20) claims including six (6) independent claims. Applicant, therefore, believes that an additional fee for claims amendment is currently not due.

If the Examiner believes that there are any informalities that can be corrected by Examiner's amendment, or that in any way it would help expedite the prosecution of the patent application, a telephone call to the undersigned at (561) 989-9811 is respectfully solicited.


The Commissioner is hereby authorized to charge any fees that may be required or credit any overpayment to Deposit Account 50-0510.

In view of the preceding discussion, it is submitted that the claims are in condition for allowance. Reconsideration and re-examination is requested.

Respectfully submitted,

Date: May 25, 2005

By:


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